ABSTRACT OF THE DISCLOSURE

A self-calibrating radio frequency transmitter includes an adjustable oscillator, a first frequency counter, a second frequency counter, and a comparer. The radio frequency transmitter is powered by an AC power line, which presents a line frequency. The transmitter contains an adjustable frequency oscillator that oscillates at an oscillator frequency and has a desired operating frequency. The first frequency counter counts the oscillator frequency while the second frequency counter counts the line frequency. The comparer compares the counted oscillator frequency to the counted line frequency and produces an output representative of the difference between the counted line frequency and the counted oscillator frequency. This difference in frequency indicates a deviation in the oscillator frequency from the desired operating frequency. The output from the comparer is input to the oscillator to adjust the oscillator frequency back to the desired operating frequency.